Revision and Monitoring of the Strategy

The scope of the Montana Comprehensive Fish and Wildlife Conservation Strategy (CFWCS) exceeds the funding provided through the State Wildlife Grants (SWG) that would be necessary to fully implement the conservation strategies identified in each of the four components. As of 2005, SWG funding is authorized on an annual basis, and the amount can vary from year to year. The unstable nature of this funding will continue to serve as a roadblock that could prevent Fish, Wildlife & Parks (FWP) and its partners from committing to long-term conservation projects. Due to these factors, caution should be used when attempting to apply performance measures to any of the components of this plan. At current levels and time intervals of SWG funding, the inventory component of the Strategy is the most likely to be more completely implemented and, therefore, may provide more results that can be monitored through performance measures.

This Strategy is intended to be dynamic, and the potential exists to review and revise priorities and monitor success within two of the four components (species and inventory) at short-term intervals. Although this would not always be necessary, it is mentioned to demonstrate the degree to which these two components are connected and automated. The remaining two components (focus areas and community types) are linked as well; however, performance measures of landscape or community level health and conservation success are more difficult to parameterize and measure. Adequate information does not exist to establish a statewide baseline of land cover types or habitat conditions that contain consistent estimates of precision. For example, classified sagebrush land cover types in the existing database have a relatively low confidence interval attached to them. Likewise, true community structures have not necessarily been established and validated for Montana's fish and wildlife and their related habitats and geoclimatic factors. The necessary land covers and community type structures will need to be developed and refined between the beginning of Strategy implementation and the next review cycle.

Because the components range from broad- to fine-scale, the time needed to detect the success of implementation may vary from years to decades. As such, we will revise and monitor conservation success for each of the four components at different intervals. Although components will be monitored separately, the overall strategy will be revised every six years.

Conservation Focus Areas

Conservation focus areas were identified that provide some of the greatest opportunities to conserve the community types and species in greatest need of conservation. The long-term success at conserving these areas can be measured by measuring the health of the communities and species that are associated with these areas. In most cases these long-term successes will require decades to detect. In the absence of other means, progress toward

implementing the conservation strategies described for each focus area will be used as the performance measure for this component. Implementation will be measured as not implemented, partially implemented, fully implemented, or ongoing indefinite implementation needed. In the future, if adequate land cover layers are developed and communities are defined, methods for monitoring the health and status of the communities and species within focus areas could be refined. Fish, Wildlife & Parks staff will coordinate the revision of this component every six years in collaboration with its partners and through public review.

Community Types

Fish and wildlife communities have not been defined in Montana. Although much of the information contained in this Strategy is not new, the strategy planning process provided an opportunity to begin developing general and essential associations for all fish and wildlife species with their habitats by building on many years of research and work. We linked fish and wildlife with plants and geoclimatic characteristics to attempt to create community types. In the future, much research is needed to fully develop and validate true fish and wildlife communities in Montana. Success at conserving these communities could then be measured by using an index of overall community conditions. Success at conserving communities will require long-term conservation efforts, and success will most likely be detected on the scale of decades versus years.

In the absence of validated communities for Montana, progress toward implementing the conservation strategies described for each community type will be used as the performance measure for this component. Implementation will be measured as not implemented, partially implemented, fully implemented, or ongoing indefinite implementation needed. Once validated communities have been defined for Montana, monitoring the health and status of the communities will provide measures of success for implemented conservation strategies. Fish, Wildlife & Parks staff will coordinate the revision of this component every six years in collaboration with its partners and through public review.

Species

The FWP Information Management Unit will monitor success of implementing the species component of the Strategy annually. The Montana Animal Species of Concern List (SOC), cooperatively maintained by FWP and MNHP, will be used as a performance measure for this component. Each year the MNHP senior zoologist and the chief of the FWP Information Management Unit will conduct a review of the Montana Animal Species of Concern List using a protocol developed by NatureServe and modified for Montana. The review combines the quantitative documentation approach from NatureServe with the professional knowledge of staff from numerous agencies and organizations to determine species status. Subsequent to the annual review, the FWP Information Management Unit will use information from the updated Species of Concern List

to recalculate the assignment of level of conservation need to all Montana fish and wildlife species as described in the species methods section of this Strategy. Changes in tier assignments will be used to help gauge if species are being successfully conserved in Montana. Overall, the movement of any species from a higher tier to a lower tier (e.g., Tier I to Tier II) or off the list entirely will be noted as a positive. Movement of species from a lower tier to a higher tier will be identified as a "matter of concern."*

*Note: Upward movement of species in tier assignment should not be considered a conservation failure. If inventory needs are successfully addressed, awareness will be raised of the imperiled status of some species that were previously not known due to inadequate observational or monitoring data. Likewise, prudent judgment should be used when considering a downward movement of species in tier assignments as a conservation success because addressing inventory needs will also raise awareness of the healthy status of some species that were previously not known due to inadequate observational or monitoring data. It is impossible in most cases to link specific conservation actions to the success or failure of a species, and for this reason, the SOC list is used as a tool for helping to gauge success, not quantify it.

Identifying if the conservation strategies identified for each of the Tier I species are being implemented will also be used as a performance measure for this component. Implementation will be measured as not implemented, partially implemented, fully implemented, or ongoing indefinite implementation needed. Fish, Wildlife & Parks staff will coordinate the revision of this component every six years in collaboration with its partners and through public review.

Inventory

The FWP Information Management Unit will measure success in the inventory component of the Strategy annually. The performance measure for this component will be the FWP/MNHP Point Observation Database (POD). The database is the statewide clearinghouse for fish and wildlife species data from many agencies and organizations such as FWP, MNHP, the U.S. Forest Service, The Nature Conservancy, and the Audubon Society for species not currently being monitored any other way. The POD will be queried to determine if gaps in occurence data for species and species groups identified in the Strategy as in greatest need of inventory have been met. The tier assignments for species and species groups will be recalculated based on the updated POD and other information, and revised priorities for inventory will be updated in the web-based Strategy and then transmitted to FWP's collaborators. Fish, Wildlife & Parks staff will coordinate the revision of this component every six years in collaboration with its partners and through public review.